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U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
Division of Forest Insect Research

3-4-54

FOREST INSECT CONDITIONS
CUYAMACA RANCHO STATE PARK
SAN DIEGO COUNTY, CALIFORNIA
NOVEMBER, 1953
RECONNAISSANCE SURVEY

On September 2, 1953, an informal discussion of forest insect problems in Cuyamaca Rancho State Park was held by Eugene Velzy and Harvey Moore of the State Division of Beaches and Parks, and George L. Downing of the Division of Forest Insect Research, U. S. Forest Service, at the State Park headquarters. The insect control project against the western pine beetle infestation in the spring of 1953 was discussed and it was generally agreed that the project had been successful in reducing the western pine beetle population to a point where the year-round maintenance program would handle the situation with a minimum of effort. However, it was pointed out that a number of Jeffrey pine trees within the Park were being killed by flatheaded borers and that a reconnaissance survey of the situation was necessary to determine the extent and severity of the problem. On November 25, 1953, the author and Ray Murphy, in charge of insect control work in the Park, made a reconnaissance of the Jeffrey pine type within the Park.

Following the Conejos burn of 1951, there occurred a build-up of insect populations in the fire-damaged timber in Cuyamaca Rancho State Park. By 1953, Coulter and ponderosa pine losses due to the western pine beetle had become so numerous as to necessitate direct control measures. As a result, a control program[1/] was carried out during the spring of 1953. Within this same period the California flatheaded borer, Melanophila californica Van Dyke was also taking its toll of fire-weakened Jeffrey pine around the burn. However, no control measures were attempted against this insect species in the control project of 1953, primarily because sufficient data was not available on the results of chemical treatment of flathead-infested Jeffrey pines. During this past year, penetrating oil sprays used on logs infested with California flatheaded borers have proved to be equally as effective in killing these borers as they have been in killing the western pine beetle. The spray formulation used is the same as that being used against the western pine beetle; i.e., 1 part orthodichlorobenzene to 6 parts of diesel fuel, applied to all sides of the logs.

1/ Wray, C. J. Control of the western pine beetle with toxic sprays in Cuyamaca Rancho State Park, Spring 1953. Forest Insect Laboratory, Berkeley, Calif., Aug. 6, 1953.

The reconnaissance survey revealed that losses due to flatheaded borers were generally high throughout the Jeffrey pine type. This was an increase over previous years, probably due to the spread of populations built up in the fire-scorched timber. Although no formal appraisal has been made, it is estimated that between 75 and 125 trees will need treatment.

Recommendations

1. That direct control of the current California flatheaded borer infestation in Jeffrey pine be undertaken this spring.

2. That the present policy of year-round maintenance control against the western pine beetle be continued and expanded to include the California flatheaded borer.

Berkeley, California
March 4, 1954

George L. Downing
Entomologist

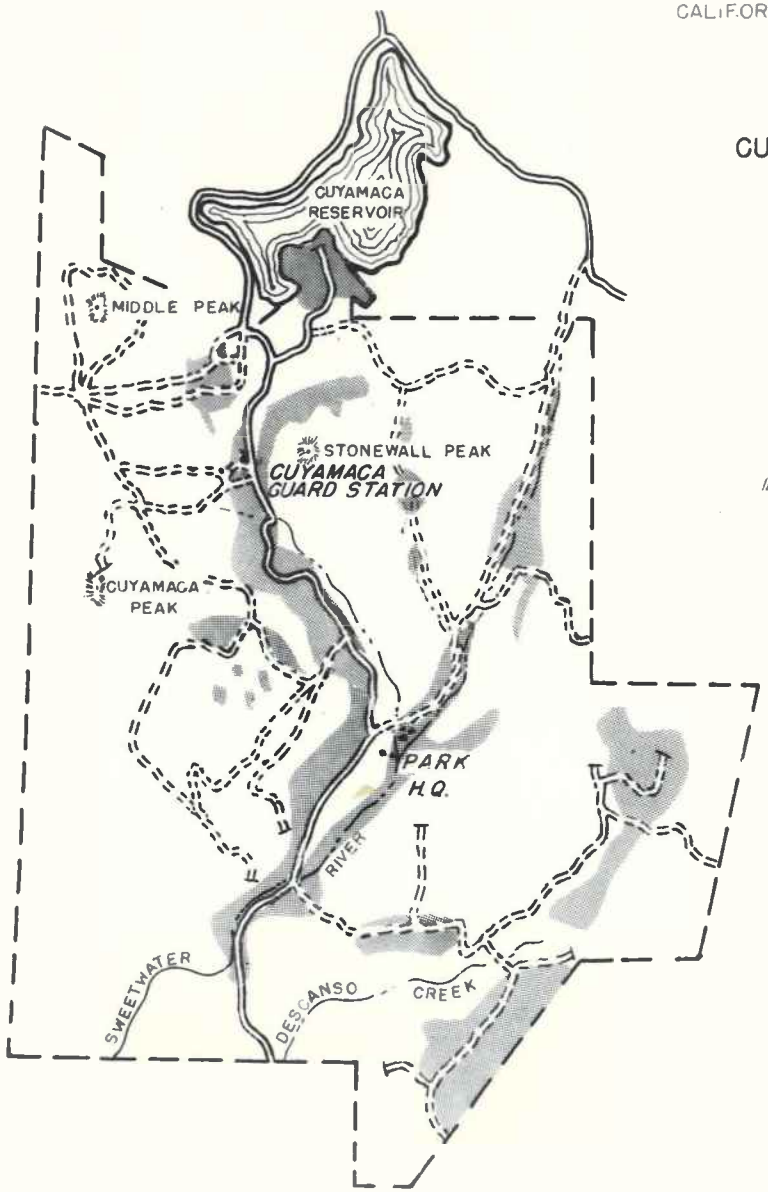
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION

DIVISION OF FOREST INSECT INVESTIGATIONS

CUYAMACA INFESTATION AREA

SAN DIEGO COUNTY, CALIFORNIA

SAN BERNARDINO MERIDIAN



LEGEND

Jeffrey Pine Type

State Park Boundary

SCALE

0 1 2 3 In Miles

1-25-57 LRF